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10/062,799	01/31/2002	Valene Skerpac		3395

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EXAMINER

DAVIS, ZACHARY A

ART UNIT	PAPER NUMBER
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2437

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/062,799

Applicant(s)

SKERPAC, VALENE

Examiner

Zachary A. Davis

Art Unit

2437

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-8, 11, 14 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-8, 11, 14 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A response to the notice of non-compliant amendment was received on 04 December 2009. By this response, Claims 2, 4, and 5 have been amended. New Claim 18 has been added. No claims have been canceled. Claims 1, 2, 4-8, 11, 14, and 16-18 are currently pending in the present application.

Response to Arguments

2. Applicant's arguments filed 06 August 2009 have been fully considered but they are not persuasive.

Claims 1, 2, 4-7, 16 and 17 were rejected under 35 U.S.C. 102(a) and (e) as anticipated by Hattori, US Patent 6094632. Claims 8, 11, and 14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori. Regarding the prior art rejections, and with specific reference to independent Claim 1, Applicant argues that Hattori does not disclose a station for receiving information representative of a user and generating a signal responsive thereto and a controller to receive and validate the signal as representative of the user (page 11 of the present response). In particular, Applicant argues that Hattori does not disclose how the speaker recognition device and text generation section are activated (see pages 11-12 of the present response). In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e.,

activation of the system) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claims make no mention of conditions for activation of the system, nor does the specification appear to mention any activation whatsoever. The Examiner submits that, even if Hattori does not explicitly disclose how the systems therein are activated, it would nevertheless be inherent that the system is activated (since the performance of various actions is described). This argument appears to be moot, however, because the claims are silent as to the activation of the system.

Applicant further argues that Hattori does not disclose delivering a one time challenge phrase to the station for the user to speak the challenge phrase exactly, because in Hattori, the user also speaks a password in addition to provided text (see page 12 of the present response). However, the Examiner respectfully submits that the addition of a password to specific text does not alter the fact that the combination of the password and specified text do constitute a one time challenge phrase. In particular, although the password may stay constant (at least for short time periods), the specified text is generated with each occurrence (see, for example, column 14, lines 47-56), and therefore, the combination of the specified text and password is still a one-time challenge phrase. Further, the delivery of the instructions "please say today's date, December 25, and your password" (see Hattori, column 9, lines 61-64, for example), is still seen to correspond to the claim limitation of delivering a one-time challenge phrase for the user to speak the phrase exactly. It is noted that the claim does not require a

verbatim repetition of the instructions but just that the user speaks the phrase exactly. The claim does not exclude, by the limitation "delivering said one-time challenge phrase", providing instructions for the user that clearly indicate what the phrase itself is, without necessarily using the specific words of the phrase. The user would know to say the specific date and to replace the words "your password" with the actual password itself, and this would still constitute speaking the delivered phrase exactly.

Applicant additionally argues that Hattori does not disclose the functions of the controller processing the claimed second signal for speaker recognition and for speech recognition and that Hattori instead discloses processing text verification (i.e. speech verification) on one "input pattern" and calculating a degree of similarity to a reference pattern (i.e. speaker verification) on a second "input pattern" corresponding to the password. Applicant asserts that Hattori does not process the same signal for both speaker recognition and speech recognition (see pages 12-13 of the present response). The Examiner respectfully disagrees. Although the signal representative of the spoken response received from the user is split into two parts, those two parts of the same signal are processed for both speaker recognition and speech recognition (see column 9, lines 21-28; column 10, line 56-column 11, line 16). That is, the second signal is still processed for both speaker recognition and speech recognition. The claim does not preclude processing different parts of the signal using different techniques; the claim merely requires processing the second signal using both speech and speaker recognition, and the Examiner submits that processing part of a signal still constitutes processing that signal.

The Examiner acknowledges that Applicant has noted that the claimed method does not require the use of a spoken password as in Hattori (page 13 of the present response); however, the Examiner notes that the claims also do not preclude the use of a spoken password.

With respect to Claim 2, Applicant reiterates arguments presented with respect to Claim 1 (see pages 13-14 of the present response), which the Examiner has addressed above in detail.

Therefore, for the reasons detailed above, the Examiner maintains the rejections as set forth below.

Claim Objections

3. With respect to the amendments to Claims 1, 4, and 16 as suggested in the previous Office action, Applicant alleges that the recommended amendments "would obfuscate the language of the claims". The Examiner respectfully disagrees. In particular, the Examiner submits that if the phrase "in response to said first signal" were moved as suggested in the previous Office action and set off by commas as also suggested, then clarity would be increased. The objections to these claims are maintained. The objections to Claims 2 and 5 are withdrawn in light of the amendments to the claims.
4. Claims 1, 4, and 16 are objected to because of the following informalities:

In Claim 1, clarity could be increased by moving the phrase "in response to validation of said signal" in line 11 to earlier in the limitation where it would not be surrounded by other prepositional phrases. For example, the phrase could be moved to line 8, after "said controller", so that the claim would read "said controller, in response to validation of said signal, communicating with said first data base..." The phrase could also be moved so that the claim would read "said controller communicating, in response to validation of said signal, with said first data base..."

Similarly, in Claim 4, clarity could be increased by moving the phrase "in response to said first signal" from lines 9-10 in a similar manner. For example, the phrase could be moved to line 8, so that the claim would read "said controller being operatively connected to said first data base to, in response to validation of said first signal, generate and deliver..."

Additionally, in Claim 16, clarity could be increased by moving the phrase "in response to said first signal" from line 10 in a similar manner. For example, the phrase could be moved to line 8, so that the claim would read "a controller connected to said first data base to, in response to validation of said first signal, generate a one-time challenge phrase..."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 4-7, and 16-18 are rejected under 35 U.S.C. 102(a) and (e) as being anticipated by Hattori, US Patent 6094632.

In reference to Claim 1, Hattori discloses a biometric security system including a station for receiving input information, which is representative of a user, from the user and generating a signal responsive thereto (column 9, lines 5-11, where an ID is input); a database having a plurality of words and language rules for randomly generating one-time challenge phrases (see column 9, lines 19-47; column 8, line 65-column 9, line 5, where “specified text” is provided to the user, which is a random phrase, see also column 9, lines 61-64); a database having biometric models of users (column 9, lines 5-20; column 11, lines 3-11, where a reference pattern of a registered speaker is stored; see also column 11, lines 17-42, and column 12, lines 14-54, noting the general references to plural speakers); and a controller that receives and validates the signal as representative of the user, where the controller communicates with the database that

generates one-time challenge phrases for the user to speak exactly (column 8, line 65-column 9, line 5; column 9, lines 61-64), and communicates with the station to receive a spoken response and generate a second signal that represents the response (column 9, lines 5-11, the phrase is uttered by the unknown speaker), to validate voice information by speaker recognition (column 9, lines 21-28; column 11, lines 3-11) and verify voice information by speech recognition if the challenge phrase is matched exactly (column 9, lines 21-28; column 10, line 56-column 11, line 2), and to validate the spoken response to the challenge as representative of the user if the validation by speaker recognition and verification by speech recognition succeed (column 11, lines 12-16).

Claims 2 and 7 are directed to methods corresponding substantially to the system of Claim 1, and are rejected by a similar rationale, noting further that Hattori also discloses a private and personal challenge phrase (see column 8, line 65-column 9, line 5).

In reference to Claim 4, Hattori discloses a biometric security system including a station for receiving input information, which is representative of a user, from the user and generating a first signal responsive thereto (column 9, lines 5-11, where an ID is input); a database having a plurality of words and language rules for randomly generating one-time challenge phrases (see column 9, lines 19-47; column 8, line 65-column 9, line 5, where "specified text" is provided to the user, which is a random phrase, see also column 9, lines 61-64); a database storing a biometric model of a user (column 9, lines 5-20; column 11, lines 3-11, where a reference pattern of a registered

speaker is stored); and a controller receiving and validating the first signal, where the controller further randomly generates and forwards a word phrase as a challenge for a user to speak exactly (column 8, line 65-column 9, line 5; column 9, lines 61-64), receives and compares with the challenge a spoken response to the challenge (column 9, lines 5-11), and verifies the response as exactly matching the challenge (column 9, lines 21-28; column 10, line 56-column 11, line 2), and where the controller additionally validates the response if the response matches the stored model (column 9, lines 21-28; column 11, lines 3-11), and the controller issues an authentication signal if both the response matches the phrase and the response is representative of the user (column 11, lines 12-16).

In reference to Claim 18, Hattori further discloses storing words and language rules in a plurality of language sets specific to different subject areas (see, for example, column 9, lines 19-47; column 8, line 65-column 9, line 5; column 9, lines 61-64, words and phrases in English; see also column 11, lines 18-37, disclosing use of Japanese language).

Claims 5 and 6 are directed to methods corresponding substantially to the system of Claim 4, and are rejected by a similar rationale, noting that Hattori discloses a multiplicity of users and stored biometric models (column 11, lines 17-42, and column 12, lines 14-54, noting the general references to plural speakers), and noting further that Hattori also discloses a private and personal challenge phrase (see column 8, line 65-column 9, line 5, for example).

In reference to Claims 16 and 17, Hattori discloses a speech biometric security system including a station for receiving input information, which is representative of a user, from the user and generating a signal responsive thereto (column 9, lines 5-11, where an ID is input); a database having a plurality of words and language rules for randomly generating one-time challenge phrases (see column 9, lines 19-47; column 8, line 65-column 9, line 5, where "specified text" is provided to the user, which is a random phrase, see also column 9, lines 61-64); a database having biometric models of users (column 9, lines 5-20; column 11, lines 3-11, where a reference pattern of a registered speaker is stored; see also column 11, lines 17-42, and column 12, lines 14-54, noting the general references to plural speakers); and a controller that receives and validates the signal as representative of the user, where the controller communicates with the database that generates one-time challenge phrases for the user to speak exactly (column 8, line 65-column 9, line 5; column 9, lines 61-64), and communicates with the station to receive a spoken response and generate a second signal that represents the response (column 9, lines 5-11), to process the response by speaker recognition and issue a first validation signal in response to a match between the spoken response and a stored biometric model (column 9, lines 21-28; column 11, lines 3-11) and simultaneously process the response by speech recognition and issue a second validation signal if the spoken response exactly matches the challenge phrase (column 9, lines 21-28; column 10, line 56-column 11, line 2), and issue a positive authentication signal in response to the first and second validation signals (column 11, lines 12-16).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori.

In reference to Claims 8 and 11, Hattori discloses everything as described above in reference to Claims 2 and 5, respectively. Hattori does not explicitly disclose establishing a session time out limit; however, Official notice is taken, and it has been admitted as prior art due to the inadequate traversal of such Official notice, that it is well known in the art to establish a session time out in order to require that authentications must take place within a specific time period, so that the probability of an imposter being able to take more sophisticated deceptive actions is decrease. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods of Hattori to include a time out, in order to increase security and to realize the above noted predictable result.

In reference to Claim 14, Hattori discloses everything as described above in reference to Claim 5. Hattori does not explicitly disclose encrypting or digitally signing the spoken response. However, Official notice is taken, and it has been admitted as

prior art due to the lack of traversal of such Official notice, that it is well known in the art to encrypt data when privacy of that data is needed and/or if that data will be sent over an insecure channel. Further, Official notice is taken, and it has been admitted as prior art due to the lack of traversal of such Official notice, that it is well known in the art to use a digital signature when it is necessary to verify the integrity of data, i.e. to make sure that the data has not been altered. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Hattori to include encryption, in order to increase the privacy and security of the data, and to include a digital signature, in order to allow the integrity of the data to be verified.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571)272-3870. The examiner can normally be reached on weekdays 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Zachary A Davis/
Primary Examiner, Art Unit 2437